Are health and safety representatives more effective at representing their designated work group having completed a Certificate IV course in OHS?

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ABSTRACT

Some elected Health and Safety Representatives in Australia choose to undertake a Certificate IV level OHS course. To determine if they are more effective at representing their Designated Work Group as a result, a sample population of Health and Safety Representatives and members of their Designated Work Group were surveyed. The survey participants were also tested in regard to their approach to solving health and safety problems posed in three hypothetical workplace scenarios. The results were compared with the results of the same test undertaken by Health and Safety Representatives that had only completed a 5-day training course.

As a result of undertaking a Certificate IV OHS program, Health and Safety Representatives have more confidence in undertaking workplace inspections and the frequency and the quality of those inspections is increased. They seek more information from their employer in regard to workplace hazards and are consulted by management more often and also consult with the members of their Designated Work Group more frequently.

There were statistically significant differences between responses to the three hypothetical workplace scenarios given by subjects that had undertaken a Certificate IV course and those that had only completed a 5-day training program. The Certificate IV course group were more likely to apply safe place control principles to problems. Together with increased frequency of inspections and greater consultation, this is likely to lead to more effective representation of the DWG.

Cite this article as: Merriman, G. & Cowley, S., (2009) *Are health and safety representatives more effective at representing their designated work group having completed a Certificate IV course in OHS?*, J Health & Safety Research & Practice, 1(1), 13-18

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Key words
training, education, safety, representation, hierarchy

INTRODUCTION

In Victorian workplaces, employees may request the establishment of a Designated Work Group (DWG) (Victoria, 2004). A DWG is a grouping of employees that facilitates representation of those employees on health and safety issues and is determined in consultation between the workers and management. Once established the members of the DWG can request the election of a Health and Safety Representative (HSR). This election is coordinated by the employer in consultation with the employees. All members of the DWG can nominate for election. Once elected a HSR is entitled to attend training. The entitlement extends to attending an Initial 5-Day occupational health and safety (OHS) Program that is approved by the Victorian WorkCover Authority and a refresher course at least once in each year during the HSRs 3-year term of office. HSRs may be re-elected on completion of the 3 year term (Victoria, 2004). The training entitlements are a minimum and some HSRs attend further training either with or without the support of their employer.

While the content of safety training for workers' representatives has been reviewed by many (NIOSH, 1999) there is a dearth of material that links the content to the influence and impact that the training has on HSR action at the workplace (Walters et al., 2001 p. 16).

A review of the literature shows that OHS training for HSRs is rarely assessed against safety improvements in the workplace, and is more likely to be assessed by subjective culture change surveys (Calkin et al., 2000; Doucouliagos et al., 2000; McQuiston, 2000) or assessment of workers' subjective perceptions of change (Blewett, 2001; Brown et al., 1992; Gotsch et al., 1994; Vanderkruk, 2003).

In their seminal paper that assessed the impact trade union health and safety training on the activity of HSRs in the UK, Walters, Kriby et al. (2001), concluded that continued training of HSRs does have an impact on safety. However, they advise that more evaluation would be useful. Culvenor, Cowley, et al. (2003b) undertook an analysis of the HSR training in South Australia where health & safety representatives could undertake 3 levels of training: basic, advanced, continuing. An immediate improvement in the way HSRs judged effective solutions to safety problems was observed following basic training. However results suggested that this effect diminished over time. There appeared to be some shift in thinking by the HSRs who undertook continuing training, although the thinking of most remained distinctly orientated towards victim-blaming in regard to workplace incidents and towards the application of behavioural risk controls instead of engineering controls. The latter was described as a "safe-person" orientation rather than the "safe-place" orientation that is consistent with contemporary approaches to health and safety management and legislative requirements in each Australian jurisdiction (Culvenor, 1997).

Some elected HSRs in Australia choose to undertake a Certificate IV level course in occupational health and safety (OHS) through the vocational education system (TAFE). This paper reports research that was undertaken to determine if health and safety representatives (HSR) that have completed a Certificate IV level course in occupational health and safety (OHS) are more effective at representing their Designated Work Group (DWG) than HSRs who have only completed the Victorian Initial 5-Day OHS Program.

METHOD

The methodology had four elements; (i) a questionnaire survey of elected HSRs (n=27) that had completed a Certificate IV OHS course between 2001 and 2005 (henceforth referred to as the HSR survey); (ii) a test of the HSR survey participants (n=27) in regard to their approach to solving health and safety problems posed in the descriptions of three hypothetical workplace scenarios (henceforth referred to as the Certificate IV HSR scenario test) (iii) a questionnaire survey of the members of the DWG's (n=220) that were represented by the 27 HSRs that had completed a Certificate IV OHS course and were participating in the HSR survey (this element henceforth referred to as the DWG survey); and (iv) a test of a separate population of HSRs (n = 147) in regard to their approach to solving health and safety problems posed in the descriptions of three hypothetical workplace scenarios (henceforth referred to as the 5-day HSR scenario test). The scenarios applied in this test were the same as those presented within the Certificate IV HSR scenario test. This test was conducted upon completion of Initial 5-day HSR training provided by the Australian Workers Union. All surveys and tests were conducted between November 2002 and November 2007.

All HSRs that participated in the research were members of The Australian Workers' Union and were recruited by representatives of that organisation. Those that had undertaken a Certificate IV course in OHS had completed a program delivered by the University of Ballarat. The program conformed to the National Vocational Education and Training BSB41407 Certificate IV in Occupational Health and Safety delivered under the auspices of the Training & Further Education (TAFE) Business Services Training Package. The

course required 10 days of classroom attendance and the completion of a number of assessable written tasks in accord with the Training Package requirements. The research was approved by the University of Ballarat Human Research Ethics Committee in March 2007.

The questions used in the HSR and DWG surveys were designed to elicit information about the role the HSR plays in the workplace and the extent to which they undertake activities in accord with those mandated within the Victorian OHS Act (Victoria, 2004) as well as outlined in the Victorian Trades Hall Council (VTHC) "Union Charter of Workplace Rights, Occupational Health and Safety, Rehabilitation and Compensation" (Victorian Trades Hall Council, 2003). Thus the purpose of the surveys was to gather information about the extent to which HSRs were representing their respective DWGs by performing the duties expected of them and those duties that were expected of them by their DWG peers.

The HSR scenarios presented subjects with 3 case study type problems used elsewhere to assess knowledge of the control-at-source and hierarchy of control problem-solving model that underpins Australian OHS legislation (Culvenor, 1997; Culvenor et al., 2003b; Culvenor et al., 1997). Each scenario presented problems that consisted of a short description of an accident followed by a set of six potential solutions. For each problem, subjects were required to rank the solutions to indicate what they believed would be the most effective solution through to the least effective. When ranking these solutions, subjects were instructed to put aside practicalities such as cost and concentrate on what would be most effective. To test the relationship between a subject's response and the ideal model, each response (rank from 1-6) was compared with a standard rank based on the hierarchy of control model. The standard ranking of solutions is based on the judgements of experts in occupational health and safety (Culvenor et al., 1997).

The HSR scenario test results were compared to the Certificate IV HSR scenario test results using the Spearman correlation coefficient with a range of -1 to + 1 on a scale of sliding interval quality. The comparison was made between the two sets of results using a Mann Whitney U-test for independent samples (Culvenor, 1996). The results indicate if the participants prefer safe-place solutions that remove the hazards from the workplace (higher order control measures) or safe-person solutions that rely on training and administration controls to hazards (lower order control measures). Thus the results may be used to (i) predict whether the members of the respective are likely to propose higher order controls while representing their designated work group on health and safety matters and (ii) indicate whether the Certificate IV training is more effective at instilling safe-place approaches within participants.

RESULTS

Valid completed questionnaires were received from 19 (70% response) HSRs who had completed a Certificate IV in OHS (the HSR survey) and from 53 DWG members (24% response) (the DWG survey). Of the Certificate IV HSRs; all were more than 30 years of age; 47% (9 of 19) had served as a HSR for 10 or more years; 47% (9 of 19) had been or were a union delegate; and 47% (9 of 19) finished their education at year 10 or below. 82% (42 of 53) of the respondents to the DWG survey indicated that they knew their HSR had undertaken a Certificate IV in OHS.

Only 16% (3 of 19) of respondents indicated that they were consulted by management in regard to OHS matters "often" or "always" before undertaking the Certificate IV course while 74% (14 of 19) indicated that they were consulted "often" or "always" after. 52% (10 of 19) stated they were "never" or "rarely" consulted by management prior to undertaking the program. 60% (40 of 53) respondents to the DWG survey supported

the assertion that their HSR is consulted more by management after completing the Certificate IV OHS course; 72% (37 of 53) of respondents strongly agreed or agreed that the HSR attends more safety related meetings since completing the certificate IV course. A total of 94% (48 of 53) of the DWG members indicated that they agreed or strongly agreed that the HSR has shown more leadership since completing the Certificate IV. 52% (10 of 19) of the HSRs believed they were discriminated against prior to undertaking the Certificate IV course whereas 37% (7 of 19) reported discrimination having completed the Certificate IV course.

Only 16% (3 or 19) of HSR survey respondents indicated that prior to undertaking the Certificate IV course they "always inspect their DWG for hazards"; whereas 57% (11 of 19) indicated that having completed the Certificate IV OHS Course they "always inspect their DWG for hazards". This was supported by 69% (35 of 53) of respondents to the DWG survey that indicated that "the HSR is now conducting more inspections of the work area since undertaking the Certificate IV". 78% (29 of 53) of respondents also indicated that the quality of the audit conducted by the HSR had improved. Eighteen (18) of the 19 HSRs who completed the Certificate IV OHS course either strongly agreed or agreed that they had more confidence in undertaking inspections after completing the Certificate IV course in OHS.

A total of 37% (7 of 19) of respondents indicated that prior to undertaking the Certificate IV course they "Access information from the employer on hazards in the Workplace". This rose to 95% (18) after completing the course.

The results of the scenario tests revealed that that the HSRs who had undertaken a Certificate IV OHS program had a stronger tendency to recommend safe-place solutions (i.e. scores closer to +1.0 and closer to the top of a hierarchy of controls) than the HSRs who had only completed a 5-Day Initial training program as shown in Table 1. The HSR responses were compared with a standard rank (i.e. solutions to the health and safety problems posed ranked in accord with the judgements of experts in occupational health and safety (Culvenor et al., 1997)).

The comparison was made between the two sets of results using a Mann Whitney U-test for independent samples (Culvenor, 1996). The results of the Mann-Whitney tests indicate that the difference between the groups in each scenario is significant at the 0.5 level (scenario 1 p=0.018, scenario 2 p=0.012, scenario 3 p=0.032).

LEVEL OF TRAINING	MEAN CORRELATION WITH STANDARD RANK		
	Scenario One	Scenario Two	Scenario Three
	Mean	Mean	Mean
Initial 5-Day	0.00	-0.03	0.04
Certificate IV	0.42	0.38	0.39

Table 1 Certificate IV & 5-day HSR scenario test results

DISCUSSION

The results of the questionnaire surveys suggest that after undertaking the Certificate IV course, HSRs were consulted by management more frequently. Increased consultation creates opportunities for HSRs to influence the direction of safety for the site. It should be noted however, that there were changes to the Victorian OHS legislation while this research was underway and a renewed emphasis on the importance of consultation may confound the findings. However, the responses to the DWG survey indicated that more consultation occurred between the HSR and the DWG after the HSR completed the Certificate IV OHS course and this is less likely to be influenced by the changes to

legislation. HSR consultation with DWG members and consultation with the HSR by management is widely recognised as being vitally important to effective representation by HSRs (Blewett, 2001; Sweeney, 2006; Walters et al., 2005).

The HSR and DWG surveys indicated that after completing a Certificate IV OHS program, HSRs conducted significantly more site hazard inspections. One DWG survey participant volunteered that they know when their HSR is doing a good job, "when I see him doing inspections". The HSRs also reported greater confidence while undertaking inspections after completing the course. Walters also found that HSR training in the UK leads to an increase in self-confidence (Walters et al., 2001). One HSR who had completed the Certificate IV and been a HSR for 20 years volunteered that they are a better HSR having, "Broader knowledge i.e. guarding, understanding of management views".

Discrimination against HSRs is considered a major road block to effective representation (Blewett, 2001; Walters et al., 2005) and is an issue of high importance to HSRs and trade unions (Victorian Trades Hall Council, 2003). The results of the survey indicate that there may be less discrimination of HSR after having completed a Certificate IV OHS course.

The HSRs who have completed a Certificate IV are more likely to seek information from the company on safety issues (57% increase). Greater information about workplace hazards increases the ability of HSRs to negotiate risk controls and facilitate improvements in working conditions for the members of their DWG.

The surveys revealed that the Certificate IV HSRs were sought after by their fellow HSRs on site for advice and guidance. This is consistent with the DWG survey results that indicated that the Certificate IV HSRs were not only showing leadership qualities, but also performing some duties that were perceived to be more usually management duties.

The results of the HSR scenario tests suggest that HSRs who have completed a Certificate IV program are more likely to apply the principles of a hierarchy of controls than are HSRs who have only completed a 5-Day Initial training program. This is consistent with findings in other studies where HSRs as well as safety professionals with different levels of health and safety training were compared with their respective peers using the same scenario tests (Cowley et al., 1999; Culvenor et al., 2003a). In particular, Cowley et al. and Culvenor et al (1999; 2003a) found that among HSRs who undertook the scenario tests, those with more training had a greater tendency to recommend safe place controls. However, to a large degree, the HSRs who undertake a Certificate IV program are self-selecting and possibly introduce bias to the sample given their levels of motivation and possibly higher academic ability.

While an understanding of the hierarchy of control alone does not directly indicate more effective representation, with an increased degree of consultation, this understanding is likely to lead to better controls in the workplace and greater respect from DWG members, from other HSRs and possibly from management.

CONCLUSION

The findings of the research suggest that as a result of undertaking a Certificate IV OHS program, HSRs have more confidence in undertaking workplace inspections and that the frequency and the quality of those inspections is increased. They seek more information from their employer in regard to workplace hazards and are consulted by management more often and also consult with the members of their DWG more frequently. The results indicate that discrimination against HSRs may be less likely having completed a Certificate IV OHS course.

Importantly HSRs who have undertaken a Certificate IV course are more likely to suggest safe place control principles when faced with a health and safety problem. Not only is this likely to lead to better

controls in the workplace, but it is also likely to attract greater respect from DWG members, other HSRs and management and increase the extent to which they are sought for consultation. Together with increased frequency of inspections these are likely to lead to more effective representation of the DWG.

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